

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet, said device comprising:

means for identifying the beginning of each packet;

identifying-means for identifying a first plurality of portions of data from said received stream of data and producing a first output stream;

first output means for outputting said first output stream;

selecting means for selecting a second plurality of portions of data from said received stream of data and producing an alternative output stream;

determining means for determining the relative timing of said second plurality of portions of data; and

second output means for outputting said alternative output stream, wherein the first plurality of portions of data includes audio and video data and the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained so that a fixed latency is provided between the portions of data in the received stream of data and the output of those selected portions of data, said portions of data received by the device occurring within the data packets, and said means for identifying the beginning of each packet has an output for controlling the timing of the output of the selected data by said second output means.

2. (Canceled).

3. (Currently Amended) The device as claimed in claim 2, 1 wherein each portion of data comprises a byte of data.

4. (Currently Amended) The device as claimed in claim 2, 1 wherein means are provided for identifying which of said plurality of data packets comprise data to be output by said output means.

5. (Previously Presented) The device as claimed in claim 1, wherein storage means are provided for storing information for each portion of a packet indicating if the portion of data is valid or invalid.

6. (Previously Presented) The device as claimed in claim 5, wherein said information comprises a data portion valid signal.

7. (Previously Presented) The device as claimed in claim 5, wherein the storage means comprises a first-in-first-out buffer.

8-10. (Canceled).

11. (Previously Presented) The device as claimed in claim 1, wherein means are provided for storing the selected portions of said data.

12. (Previously Presented) The device as claimed in claim 11, wherein the means for storing the selected portions of data stores only the selected portions of data.

13. (Previously Presented) The device as claimed in claim 11, wherein the means for storing the selected portions of data is a first in first out buffer.

14. (Currently Amended) The device as claimed in claim 4 wherein means are provided for storing the selected portions of said data and the second output means comprises a state machine which controls the output of the selected portions of data, said state machine receives outputs from said means for storing said selected portions of data, and said means for storing information on each portion of data, identifying which of said plurality of data packets comprise data to be output.

15. (Previously Presented) The device as claimed in claim 1, wherein the input stream conforms to the MPEG-2 standard.

16. (Currently Amended) A digital video device incorporating a device for receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet, said device comprising:

means for identifying the beginning of each packet;

identifying means for identifying a first plurality of portions of data from said received stream of data and producing a first output stream;

first output means for outputting said first output stream;

selecting means for selecting a second plurality of portions of data from said received stream of data and producing an alternative output stream;

determining means for determining the relative timing of said second plurality of portions of data; and

second output means for outputting said alternative output stream, wherein the first plurality of portions of data includes audio and video data and the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained so that a fixed latency is provided between the portions of data in the received stream of data and the output of those selected portions of data, said portions of data received by the device occurring within the data packets, and said means for identifying the beginning of each packet has an output for controlling the timing of the output of the selected data by said second output means.

17. (Currently Amended) A method of processing a stream of data comprising the steps of:

receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet;

identifying the beginning of a packet in the plurality of packets;

identifying a first plurality of portions of data from said received stream of data and producing a first output stream;

outputting said first output stream;

selecting a second plurality of portions of data from said received stream of data and producing an alternative output stream;

determining the relative timing of said second plurality of portions of data based at least in part on the identified beginning of the packet in the plurality of packets; and

outputting the alternative output stream, wherein the first plurality of portions of data includes audio and video data and the relative timing between portions of data in the received stream of data and in the alternative output stream is maintained so that a fixed latency is provided between the portions of data in the received stream of data and the output of those selected portions of data, said plurality of portions of data occurring within the data packet.

18. (Previously Presented) The method of claim 17 wherein the received data stream comprises multiplexed portions of the first plurality of portions of data and the second plurality of portions of data.

19. (Previously Presented) The method of claim 17 wherein the second plurality of portions of data comprises audio and video data.

20. (Canceled).

21. (Previously Presented) The device of claim 1 wherein the second plurality of portions of data includes audio data and video data.

22. (Currently Amended) A device for receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet, the device comprising:

a module configured to extract the information identifying the beginning of the packet and to produce a timing control signal;

first processing circuitry ~~for identifying~~ configured to identify a first plurality of portions of data in the received data stream and ~~producing~~ produce a first output data stream;

second processing circuitry ~~for identifying~~ configured to identify a second plurality of portions of data in the received data stream and ~~producing~~ produce a second output data stream; and

timing control circuitry ~~for maintaining~~ configured to receive the timing control signal and maintain relative timing ~~a fixed latency~~ between portions of data in the received data stream and portions of data in the second output stream, wherein the timing control circuitry comprises a state machine.

23. (Canceled).

24. (Previously Presented) The device of claim 22 wherein the first plurality of portions of data comprises audio and video data.

25. (Previously Presented) The device of claim 24 wherein the second plurality of portions of data comprises audio and video data.

26. (Currently Amended) A device for receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet, the device comprising:

identifying circuitry ~~for identifying~~ configured to identify a first plurality of portions of data in the received data stream and a second plurality of portions of data in the

received data stream, and to produce an output signal based on the information identifying the beginning of the packet;

first output circuitry ~~for producing~~ configured to produce a first output stream corresponding to the first plurality of portions of data in the received data stream;

second output circuitry ~~for producing~~ configured to produce a second output stream corresponding to the second plurality of portions of data in the received data stream; and

timing control circuitry coupled to the output of the identifying circuitry and the second output circuitry ~~for maintaining relative timing and~~ and configured to maintain a fixed latency between the received data stream and the second output stream, wherein the timing control circuitry comprises a state machine.

27. (Canceled).

28. (Previously Presented) The device of claim 26 wherein the first output stream comprises audio and video data.

29. (Previously Presented) The device of claim 28 wherein the second output stream comprises audio and video data.

30. (Currently Amended) A device for receiving a stream of data comprising a plurality of packets, each packet including information identifying a beginning of the packet and a plurality of portions of input data, the device comprising:

an input interface for identifying a first plurality of portions of data in the received data stream and a second plurality of portions of data in the received data stream, and for identifying the beginnings of the data packets;

an output interface for producing a first output stream corresponding to the first plurality of portions of data in the received data stream and a second output stream corresponding to the second plurality of portions of data in the received data stream; and

a timing controller coupled to the output interface and the input interface for maintaining relative timing a fixed latency between portions of data in the received data stream and in the second output stream, wherein the first plurality of portions of data includes audio and video data.

31. (Previously Presented) The device of claim 30 wherein the timing controller comprises a state machine.

32-33. (Canceled).

34. (Currently Amended) The device as claimed in claim 33, 16 wherein each portion of data comprises a byte of data.

35. (Currently Amended) The device as claimed in claim 33, 16 wherein means are provided for identifying which of said plurality of data packets comprise data to be output by said output means.

36. (Previously Presented) The device as claimed in claim 16, wherein storage means are provided for storing information for each portion of a packet indicating if the portion of data is valid or invalid.

37. (New) The device of claim 1 wherein the first plurality of portions of data includes audio and video data.

38. (New) The digital video device of claim 16 wherein the first plurality of portions of data includes audio and video data.

39. (New) The device of claim 30 wherein the first plurality of portions of data includes audio and video data.

40. (New) A device for receiving a stream of data comprising a plurality of data packets, the device comprising:

means for identifying a first plurality of portions of data in the data stream and producing a first output stream;

means for outputting the first output stream;

means for identifying data packets in the data stream that contain data for an alternate output stream;

means for selecting a second plurality of portions of data in the identified data packets;

means for storing the second plurality of portions of data; and

a state machine coupled to the means for identifying data packets and the means for storing the second plurality of portions of data, and configured to output the alternative output stream so as to maintain relative timing between portions of data in the received stream of data and in the alternative output stream.

41. (New) The device of claim 40 wherein the first plurality of portions of data includes audio and video data.

42. (New) The device of claim 41 wherein the second plurality of portions of data includes audio and video data.

43. (New) The device of claim 40 wherein the state machine is configured to maintain a fixed latency between portions of data in the received stream of data and in the alternative output stream.